

North Carolina Division of Medical Assistance

Report of HEDIS Measures

Reporting Year 2003; Calendar Year 2002

Comparisons of HEDIS Results by Systems of Care for the
Medicaid Population of North Carolina

And

Comparisons of HEDIS Results for North Carolina Medicaid
Children With Special Health Care Needs

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January, 2004

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Introduction

As reported last year, the North Carolina Division of Medical Assistance (NC DMA) administers the Medicaid program in North Carolina through three Managed Care programs and a traditional fee for service program. Carolina ACCESS I, a primary care case management program, is available in all 100 counties in the state. Medicaid recipients are linked with a primary care physician (PCP) who provides primary care and coordinates care to specialists. Carolina ACCESS II/III is an extension of the basic principles of the ACCESS I program, focusing on disease management. The program has networks of physicians participating under an administrative entity that develops strategies for disease management. Local care managers are also available to assist physicians with patient education and coordination of care activities. North Carolina Medicaid has one capitated program, Health Care Connection, located in one county of the state. Currently there is one Health Maintenance Organization participating in the program.

Approximately 70% of the Medicaid population is enrolled in one of the Managed Care programs. The remaining 30% are in traditional fee for service Medicaid depending on eligibility category and/or special circumstances that would exempt a recipient out of Managed Care.

The primary goals of the Division of Medical Assistance are to provide recipients access to medical care, promote preventive health care, assure quality of services, and manage service utilization in a cost-effective manner. Given the budget challenges that NC, as well as many other states, is facing, the use of Health Employer Information Data and Information Set¹ (HEDIS) is one tool that the state uses to assess services under current systems of care. Recognizing the need to effectively assess quality, access, and utilization, the Quality Management Unit of the NC DMA Managed Care Section, in collaboration with the Information Systems Unit of DMA, completes an annual HEDIS report. The results of these reports are also used by the Quality Management Unit to plan and evaluate quality improvement objectives throughout the year

HEDIS is a widely recognized set of performance indicators addressing access, utilization and quality. Comparisons of HEDIS results between systems of care as well as with National HEDIS benchmarks² is a useful tool in determining which systems may deliver more effective access and quality with the most cost-effective service utilization. The use of these standardized measures allows effective comparisons with other states and the National Committee for Quality Assurance's (NCQA) National Averages for Medicaid Measures.

Methodology

¹ HEDIS 2003, Volume 2, Technical Specifications was used in the data abstraction for this report.

² 2002 National Averages for HEDIS Measures can be found on the NCQA website: www.ncqa.org.

The HEDIS measurements included in this report were obtained using the 2003 HEDIS, Volume 2 Technical Specifications.³ Eligible populations were drawn from eligibility and claims data from the NC DMA's MMIS and DRIVE data warehouses. All HEDIS measures used for this report require a continuous enrollment period defined as the time in months that the recipient is enrolled in Medicaid before a particular date or event. Since NC Medicaid utilizes a monthly enrollment period, months are used to determine the continuous enrollment period. The anchor date is a date in time that the recipient is required to be enrolled in Medicaid. For a recipient to be eligible for inclusion in the HEDIS measurement, Medicaid continuous enrollment criteria, anchor date criteria, as well as any other specific parameters such as age, gender, medical diagnosis, or previous procedure/condition must be met. The allowable gap in Medicaid monthly enrollment is no more than one month for each measure.

Data was abstracted from eligibility, claims and encounter data. The HMO submits only paid encounters; therefore paid claims for the remaining systems of care were used to equate comparisons among them. Data was retrieved using a 6-month lag time for claims to process. This lag time period may be adequate for office-based visits however may result in undercounting of inpatient visits. Other data limitations that may impact the reported results are as follows:

- The NC DMA DRIVE data warehouse contains a rolling 3-year time period of data. Therefore, some exclusions occurring prior to this period may not have been identified.
- This report contains results reported from administrative claims data only. The use of a hybrid data retrieval including medical record review may have increased the results on some measures.
- The NC DMA has a complex processing system for encounter data. Any encounter claim denied for errors is returned to the HMO for correction and is not loaded into the DRIVE data warehouse until the claim is corrected. As a result, HMO results may be underreported.

This report also includes a subset of HEDIS measures for Children With Special Health Care Needs (CSHCN). These results are used for federal and state reporting and quality assurance purposes. NC uses the federal definition of CSHCN and a self-identification definition developed by the NC DMA to identify these children.

The report formatted to show comparisons not only between systems of care but also comparisons with results from the prior year's report and the National HEDIS benchmark mean. Complete data sets showing numerators and denominators can be found in Appendix II of the report.

The reader should also note that HEDIS reporting year 2003 includes data abstracted from calendar year 2002.

The HEDIS Measures chosen for this report are as follows:⁴

³ See Appendix I for descriptions of HEDIS measures contained in this report.

⁴ Complete descriptions of each measure are located in Appendix I of this report.

- Childhood Immunization Rates 1 and 2
- Adolescent Immunization Combinations 1 and 2
- Breast Cancer Screening
- Cervical Cancer Screening
- Diabetic HbA1c Testing
- Diabetic Retinal Exams
- Diabetic LDL-C Screening
- Appropriate Meds for People With Asthma, Age 5-9 years, 10-17 years, and 18-56 years
- Adult's Access to Preventive/Ambulatory Services, Ages 20-44 years, 45-64 years, and 65 years and older
- Children's Access to Primary Care Practitioners Age 12-24 months, 25 months-6 years, and 7-11 years
- Well-Child visits in the first 15 months of life, from 0 visits-6 or more visits
- Well-Child visits in the 3rd through the 6th years of life
- Adolescent Well Care visits, Age 12-21 years
- Timeliness of Prenatal Care
- Inpatient Utilization-General Hospital/Acute Care-Total discharges/1000 Member Months, Surgery discharges/1000 Member Months, Maternity discharges/1000 Member Months, and Medicine discharges/1000 Member Months
- Ambulatory Care, Outpatient visits/1000 Member Months, Emergency Department visits/1000 Member Months, Ambulatory Surgery Procedures/1000 Member Months, and Observation Room stays/1000 Member Months

Results

The NC DMA has had a primary focus on children's health care in recent years, and improvement activities undertaken by the managed care programs and the Health Check program are reflected in this year's report results. Childhood immunization rates (Combination 1) for all of the systems of care combined are 2.36 % above the National HEDIS Mean. Rates within Carolina ACCESS I and II/III are higher than the Fee for Service program. The rate for the HMO is the lowest at 42.9%; again, however, these rates may be underreported due to the encounter data process. Childhood immunization combination 2 rates are higher compared with the NC DMA 2002 rates and are slightly above the HEDIS Mean. Additionally, children's access to primary care practitioners is improved from last year.

An area of concern remains adolescent immunization rates that are well below the HEDIS mean across all systems of care. While rates are low for the combination 1, the rates are very low for combination 2. This may be attributed to several factors and requires further analysis and development of strategies to improve access to preventive services for adolescents.

Diabetic HbA1c testing, retinal eye exams and LDL-c screening rates are improved from last year, however HbA1c testing and LDL-c screening are still below the HEDIS Mean.

As disease management initiatives increase in the managed care programs, these rates are expected to continue to increase. The same is true for the breast and cervical cancer screening rates, and the Division is planning an adult preventive services project that includes breast and cervical cancer screening.

Asthma care rates are significantly above HEDIS means. The managed care programs, particularly, ACCESS I and ACCESS II/III, have developed and implemented strategies for a consistent standard of care for children with asthma that utilizes asthma management plans, appropriate medications, patient and provider education and increasing access for children with asthma. These programs have also participated in national and local collaboratives with the National Initiative for Children's Healthcare Quality (NICHQ) and NC Center for Children's Healthcare Improvement (NC-CCHI). Further expansion of these efforts is currently underway in ACCESS I with provider site visits to assess current levels of care in practices that have high ER and Inpatient utilization for asthma related diagnoses. These visits will provide opportunities for provider education and collaboration with providers to improve asthma care.

Timeliness of prenatal care falls well below the HEDIS average. Given the importance of beginning prenatal care early in the pregnancy, this is an area that will DMA will need to continue to focus on and develop further strategies for improvement.

Total acute care inpatient utilization remains fairly consistent with last year's results and for all age groups is 4% above the HEDIS mean. Acute care maternity is 4.9% above the national HEDIS mean. Acute care surgery and medicine utilizations are also above the national HEDIS mean.

Similar comparisons are seen in the results for ambulatory care. Outpatient visits increased 10.4 visits/1000 member months from NC DMA results last year and are 84.3 visits/1000 member months above the national HEDIS mean. Total Emergency Room visits across all age groups increased 5.6 visits/1000 member months from last year and are 3.7 visits/1000 member months above the national mean. The largest increase in visits (10.8/1000 member months) occurred in the 20-44 year old age group. Ambulatory surgery procedures and observation room utilization remained fairly constant from last year.

Children with Special Health Care Needs

The HEDIS results for Children with Special Health Care Needs (CSHCN) show increases in rates for childhood and adolescent immunizations, well-child visits, and access to primary care practitioners when compared to last year's DMA results. No national HEDIS means are available for this population at this writing. Both inpatient and outpatient utilization are increased from last year except in outpatient observation room visits.

Conclusions

NC is showing improvement particularly in children's preventive care and asthma care. It is anticipated that the rates will continue to improve as the Division continues implementation of quality improvement strategies across the systems of care and the Carolina ACCESS II/III program expands creating more disease and case management opportunities.

This report also demonstrates areas for improvement in the future including diabetic care, adolescent immunizations, prenatal, and outpatient utilization. Given the budget challenges of the Medicaid program, these areas will need to be analyzed to develop the most cost-effective strategies to impact access to services and quality of care.

**Table 1. Comparisons of HEDIS data by Systems of Care, NC DMA Total,
Calendar Years, and HEDIS Means**

| Indicator | | CA I % | CA II/III % | Aggregate HMO % | Fee for Service % | Total DMA % | HEDIS Mean % |
|--|------------|-----------|----------------|-----------------------|-------------------------|-------------------|--------------------|
| Childhood Immunization Rate 1 | CY 2002 | 64.07 | 65.0 | 42.9 | 55.94 | 61.16 | 58.8 |
| | CY 2001 | 61.99 | 62.63 | 33.94 | 52.96 | 58.27 | 56.02 |
| | | | | | | | |
| Childhood Immunization Rate 2 | CY 2002 | 53.39 | 59.97 | 36.15 | 47.43 | 52.88 | 52.3 |
| | CY 2001 | 49.33 | 57.36 | 27.35 | 43.02 | 48.7 | 48.71 |
| | | | | | | | |
| Adolescent Immunization Combination 1 | CY 2002 | 27.57 | 26.05 | 10.42 | 19.76 | 24.45 | 35.7 |
| | CY 2001 | 28.74 | 29.76 | 14.38 | 20.71 | 26.19 | 27.71 |
| | | | | | | | |
| Adolescent Immunization Combination 2 | CY 2002 | 1.06 | 1.43 | 0 | .59 | .99 | 17.8 |
| | CY 2001 | 1.12 | 1.17 | .26 | 1.02 | 1.07 | 13.03 |
| | | | | | | | |
| Breast Cancer Screening | CY 2002 | 52.32 | 52.19 | 36.36 | 43.5 | 46.52 | 55.2 |
| | CY 2001 | 46.3 | 52.15 | 30.47 | 43.48 | 46.3 | 54.9 |
| | | | | | | | |
| Cervical Cancer Screening | CY 2002 | 58.62 | 58.11 | 50.26 | 42.24 | 50.21 | 60.0 |
| | CY 2001 | 55.36 | 51.93 | 48.74 | 36.1 | 45.86 | 58.39 |
| | | | | | | | |
| Diabetic HbA1c Testing | CY 2002 | 51.48 | 51.34 | 62.58 | 20.54 | 31.34 | 69.5 |
| | CY 2001 | 50.14 | 48.82 | 60.48 | 14.02 | 27.09 | 68.21 |
| | | | | | | | |
| Diabetic Retinal Exams | CY 2002 | 54.26 | 47.11 | 34.36 | 52.22 | 52.44 | 44.6 |
| | CY 2001 | 54.4 | 51.18 | 34.13 | 53.76 | 53.76 | 41.84 |
| | | | | | | | |
| Indicator | | CA I % | CA II/III % | Aggregate HMO % | Fee for Service % | Total DMA % | HEDIS Mean % |

Table 1. Comparisons of HEDIS data by Systems of Care, NC DMA Total, Calendar Years, and HEDIS Means

| | | | | | | | |
|---|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| LDL-C Screening | CY 2002 | 52.88 | 51.54 | 61.96 | 18.08 | 30.15 | 64.5 |
| | CY 2001 | 49.74 | 48.41 | 55.09 | 13.79 | 26.78 | 59.04 |
| | | | | | | | |
| Appropriate Meds for People with Asthma Age 5-9 years | CY 2002 | 69.53 | 76.9 | 66.67 | 65.09 | 70.39 | 54.2 |
| | CY 2001 | 68.11 | 82.07 | 62 | 71.08 | 72.87 | 51.91 |
| | | | | | | | |
| Appropriate Meds for People with Asthma Age 10-17 years | CY 2002 | 65.99 | 73.95 | 62.96 | 64.03 | 67.63 | 57.2 |
| | CY 2001 | 73.44 | 82.48 | 61.67 | 73.2 | 75.55 | 55.69 |
| | | | | | | | |
| Appropriate Meds for People with Asthma Age 18-56 years | CY 2002 | 68.83 | 70.25 | 57.41 | 69.41 | 69.20 | 61.5 |
| | CY 2001 | 73.62 | 78.21 | 66.67 | 73.83 | 73.98 | 60.42 |
| | | | | | | | |
| Adult's Access to Preventive/Ambulatory Services Ages 20-44 Years | CY 2002 | 81.1 | 76.79 | 69.98 | 77.61 | 78.82 | 73.1 |
| | CY 2001 | 80 | 76.42 | 71.21 | 77.52 | 78.44 | 72.36 |
| | | | | | | | |
| Adult's Access to Preventive/Ambulatory Services Ages 45-64 Years | CY 2002 | 88.89 | 84.43 | 76.82 | 78.87 | 82.41 | 79.7 |
| | CY 2001 | 88.3 | 83.28 | 78.41 | 78.89 | 82.48 | 79.41 |
| | | | | | | | |
| Adult's Access to Preventive/Ambulatory Services Ages 65 and older | CY 2002 | 93.04 | 88.52 | 100 | 78.32 | 79.49 | 77.2 |
| | CY 2001 | 92.56 | 88.57 | 100 | 79.12 | 80.24 | 79.41 |
| | | | | | | | |
| Children's Access to Primary Care Practitioners Age 12-24 months | CY 2002 | 97.43 | 95.67 | 90.44 | 94.43 | 95.67 | 90.0 |
| | CY 2001 | 96.03 | 97.74 | 90.72 | 92.87 | 95.34 | 87.63 |
| | | | | | | | |

**Table 1. Comparisons of HEDIS data by Systems of Care, NC DMA Total,
Calendar Years, and HEDIS Means**

| Indicator | | CA I % | CA II/III % | Aggregate HMO % | Fee for Service % | Total DMA % | HEDIS Mean % |
|---|------------|-----------|----------------|-----------------------|-------------------------|-------------------|--------------------|
| Children's Access to Primary Care Practitioners Age 25 months-6 years | CY 2002 | 87.84 | 87.81 | 74.43 | 81.41 | 85.35 | 78.7 |
| | CY 2001 | 85.46 | 89.99 | 78.29 | 79.11 | 84.5 | 75.42 |
| | | | | | | | |
| Children's Access to Primary Care Practitioners Age 7-11 years | CY 2002 | 81.27 | 87.43 | 73.6 | 76.56 | 81.01 | 79.1 |
| | CY 2001 | 78.54 | 86.84 | 70.71 | 77.21 | 79.87 | 75.59 |
| | | | | | | | |
| Well Child Visits in the First 15 Months of Life No visits | CY 2002 | 1.93 | .97 | 6.75 | 6.35 | 3.64 | 8.5 |
| | CY 2001 | 4.13 | 1.17 | 7.33 | 5.95 | 4.33 | 12.55 |
| | | | | | | | |
| Well Child Visits in the First 15 Months of Life One Visit | CY 2002 | 2.49 | 1.45 | 7.08 | 4.92 | 3.33 | 5.4 |
| | CY 2001 | 3.74 | 1.84 | 8.38 | 6 | 4.41 | 6.17 |
| | | | | | | | |
| Well Child Visits in the First 15 Months of Life Two Visits | CY 2002 | 4.01 | 2.57 | 14.17 | 7.39 | 5.24 | 7.2 |
| | CY 2001 | 4.6 | 3.05 | 11.86 | 8.6 | 6.17 | 7.07 |
| | | | | | | | |
| Well Child Visits in the First 15 Months of Life Three Visits | CY 2002 | 6.54 | 5.12 | 15.18 | 11.2 | 8.30 | 9.6 |
| | CY 2001 | 7.77 | 6.12 | 16.24 | 12.36 | 9.61 | 9.4 |
| | | | | | | | |
| Well Child Visits in the First 15 Months of Life Four Visits | CY 2002 | 12.59 | 10.76 | 23.95 | 16.71 | 14.05 | 14.3 |
| | CY 2001 | 13.33 | 11.44 | 22.36 | 16.64 | 14.6 | 13.57 |
| | | | | | | | |
| Well Child Visits in the First 15 Months of Life Five Visits | CY 2002 | 22.19 | 23.87 | 20.4 | 20.04 | 21.66 | 18.2 |
| | CY 2001 | 22.01 | 23.64 | 18.43 | 21.1 | 21.87 | 17.51 |
| | | | | | | | |

Table 1. Comparisons of HEDIS data by Systems of Care, NC DMA Total, Calendar Years, and HEDIS Means

| Indicator | | CA I | CA II/III % | Aggregate HMO % | FFS % | Total DMA % | HEDIS Mean % |
|---|---------|-------|-------------|-----------------|-------|-------------|--------------|
| Well Child Visits in the First 15 Months of Life Six + Visits | CY 2002 | 50.24 | 55.26 | 12.48 | 33.39 | 43.78 | 36.6 |
| | CY 2001 | 44.42 | 52.75 | 15.41 | 29.35 | 39.01 | 33.78 |
| | | | | | | | |
| Well Child Visits in the 3 rd -6 th Years of Life | CY 2002 | 60.1 | 61.44 | 39.27 | 56.09 | 58.77 | 55.1 |
| | CY 2001 | 58.99 | 63.14 | 46.08 | 52.67 | 57.84 | 50.47 |
| | | | | | | | |
| Adolescent Well Care Visits Age 12-21 Years | CY 2002 | 27.86 | 31.57 | 20 | 27.74 | 28.66 | 32.4 |
| | CY 2001 | 27.44 | 31.63 | 22.8 | 27.09 | 28.12 | 30.17 |
| | | | | | | | |
| Prenatal Care | CY 2002 | 38.25 | 52.05 | 12.82 | 41.52 | 41.13 | 71.8 |
| | CY 2001 | 37.11 | 58.73 | 29.08 | 39.36 | 39.62 | 70.92 |

Table 2. Utilization Indicators- Inpatient

| <u>Indicator Reported in Discharges/ 1000 Member Months</u> | | <u>Age <1</u> | <u>Age 1-9 Years</u> | <u>Age 10-19 Years</u> | <u>Age 20-44 Years</u> | <u>Age 45-64 Years</u> | <u>Age 65-74 Years</u> | <u>Age 75-84 Years</u> | <u>Age 85+</u> | <u>Total</u> | <u>HEDIS Mean</u> |
|---|--------------------|-----------------------------|-------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------|---------------------|------------------------------|
| | | | | | | | | | | | |
| Inpatient Utilization- General Hospital/Acute Care Total | CY 2002 | 12.2 | 2.8 | 7.1 | 28.4 | 26.9 | 12.7 | 14.4 | 17.1 | 13.6 | 9.6 |
| | CY 2001 | 12.8 | 2.8 | 7.8 | 28.3 | 26.5 | 12.6 | 14.7 | 17.9 | 13.8 | 9.37 |
| | | | | | | | | | | | |
| Inpatient Utilization- General Hospital/Acute Care Maternity | CY 2002 | N/A | N/A | 4.8 | 17 | .02 | N/A | N/A | N/A | 8.6 | 3.7 |
| | CY 2001 | N/A | N/A | 5.4 | 17.2 | .01 | N/A | N/A | N/A | 9.1 | 3.48 |
| | | | | | | | | | | | |
| Inpatient Utilization- General Hospital/Acute Care Surgery | CY 2002 | 1.4 | .4 | .7 | 3.5 | 6.4 | 2.0 | 2.0 | 2.1 | 2.0 | 1.1 |
| | CY 2001 | 1.3 | .4 | .7 | 3.4 | 6.2 | 2.2 | 2.1 | 2.3 | 2 | 1.06 |
| | | | | | | | | | | | |
| Inpatient Utilization- General Hospital/Acute Care Medicine | CY 2002 | 10.8 | 2.4 | 1.7 | 7.9 | 20.5 | 10.7 | 12.4 | 15.0 | 7.1 | 4.7 |
| | CY 2001 | 11.5 | 2.4 | 1.7 | 7.7 | 20.3 | 10.5 | 12.6 | 15.5 | 7.2 | 4.8 |

Table 2. Utilization Indicators- Ambulatory Care

| <u>Indicator Reported as Visits/1000 Member Months</u> | | <u>Age <1</u> | <u>Age 1-9 Years</u> | <u>Age 10-19 Years</u> | <u>Age 20-44 Years</u> | <u>Age 45-64 Years</u> | <u>Age 65-74 Years</u> | <u>Age 75-84 Years</u> | <u>Age 85+</u> | <u>Total</u> | <u>HEDIS Mean</u> |
|---|--------------------|-----------------------------|-------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------|---------------------|------------------------------|
| | | | | | | | | | | | |
| Outpatient Visits | CY 2002 | 552.5 | 237.4 | 200.6 | 385.5 | 552.4 | 510.9 | 528.6 | 535.1 | 350.8 | 266.5 |
| | CY 2001 | 471.1 | 219.7 | 191.5 | 372.8 | 545.9 | 521 | 539.7 | 535.7 | 340.4 | 259.64 |
| | | | | | | | | | | | |
| Emergency Department Visits | CY 2002 | 91.5 | 4739 | 44.4 | 98.7 | 67.8 | 33.9 | 32.6 | 33.4 | 60.0 | 46.3 |
| | CY 2001 | 88.5 | 43.6 | 41.3 | 87.9 | 60.4 | 28.8 | 27.6 | 28.3 | 54.4 | 43.59 |
| | | | | | | | | | | | |
| Ambulatory Surgery Procedures/1000 Member Months | CY 2002 | 4.6 | 3.1 | 2.3 | 10.5 | 23.6 | 19.5 | 16.0 | 9.3 | 8.5 | 4.5 |
| | CY 2001 | 4.7 | 3.3 | 2.3 | 10.2 | 22.4 | 19.1 | 16.2 | 9.9 | 8.5 | 4.5 |
| | | | | | | | | | | | |
| Ambulatory Care Observation Room | CY 2002 | .7 | .2 | 1.6 | 4.3 | .3 | .2 | .1 | .2 | 1.4 | 1.6 |
| | CY 2001 | .6 | .2 | 1.9 | 4.5 | .3 | .1 | .1 | .1 | 1.5 | 1.41 |

Table 3. HEDIS Measures for CSHCN by Systems of Care

| <u>Indicator</u> | | <u>CAI</u> | <u>CA II/III</u> | <u>Aggregate HMO</u> | <u>Fee for Service</u> | <u>DMA Total</u> |
|--|--------------------|---------------|------------------|--------------------------|----------------------------|----------------------|
| Childhood Immunization Rate #1 | CY 2002 | 66.91% | 71.01% | 100% | 60% | 64.78% |
| | CY 2001 | 63.13% | 61.72% | 33.33% | 56.78% | 59.01% |
| | | | | | | |
| Childhood Immunization Rate # 2 | CY 2002 | 55.15% | 66.49% | 75% | 54.25% | 57.62% |
| | CY 2001 | 51.08% | 56.61% | 33.33% | 47.51% | 50.16% |
| | | | | | | |
| Adolescent Immunization Rate #1 | CY 2002 | 30.48% | 26.17% | 0% | 21.34% | 25.93% |
| | CY 2001 | 21.15% | 20.99% | 10.48% | 15.22% | 18.42% |
| | | | | | | |
| Adolescent Immunization Rate #2 | CY 2002 | 2.94% | 1.93% | 0% | 1.03% | 1.95% |
| | CY 2001 | 1.15% | .76% | 0% | 1.55% | 1.19% |
| | | | | | | |
| Well Child Visits in the First 15 Months of Life 0 Visits | CY 2002 | 2.50% | .41% | 6.90% | 6.40% | |
| | CY 2001 | 7.19% | .34% | 9.30% | 10.8% | |
| | | | | | | |
| Well Child Visits in the First 15 Months of Life 1 Visit | CY 2002 | 2.37% | 1.22% | 10.34% | 5.71% | |
| | CY 2001 | 4.38% | .68% | 25.58% | 7.7% | |
| | | | | | | |
| Well Child Visits in the First 15 Months of Life 2 Visits | CY 2002 | 5.30% | 2.37% | 17.24% | 8.22% | |
| | CY 2001 | 6.56% | 5.07% | 20.93% | 10.87% | |
| | | | | | | |
| Well Child Visits in the First 15 Months of Life 3 Visits | CY 2002 | 7.19% | 5.79% | 13.79% | 11.78% | |
| | CY 2001 | 7.81% | 5.07% | 9.3% | 13.46% | |
| | | | | | | |
| | | | | | | |

Table 3. HEDIS Measures for CSHCN by Systems of Care

| <u>Indicator</u> | | <u>CAI</u> | <u>CA II/III</u> | <u>Aggregate HMO</u> | <u>Fee for Service</u> | <u>DMA Total</u> |
|---|------------|------------|------------------|--------------------------|----------------------------|----------------------|
| Well Child Visits in the First 15 Months of Life 4 Visits | CY 2002 | 12.93% | 13.72% | 27.59% | 16.59% | |
| | CY 2001 | 14.06% | 15.2% | 18.6% | 16.77% | |
| | | | | | | |
| Well Child Visits in the First 15 | CY 2002 | 25.33% | 22.64% | 17.24% | 20.06% | |
| Months of Life 5 Visits | CY 2001 | 23.13% | 24.32% | 13.95% | 18.36% | |
| | | | | | | |
| Well Child Visits in the First 15 Months of Life 6+ Visits | CY 2002 | 44.39% | 53.85% | 6.90% | 31.24% | |
| | CY 2001 | 36.88% | 49.32% | 2.33% | 22.03% | |
| | | | | | | |
| Well Child Visits in the 3 rd , 4 th , 5 th , and 6 th Years of Life | CY 2002 | 64.02% | 67.70% | 36.36% | 61.94% | 64.08% |
| | CY 2001 | 56.97% | 64.02% | 38.6% | 55.79% | 58.1% |
| | | | | | | |
| Adolescent Well Care Visits | CY 2002 | 25.66% | 30.14% | 0% | 34.75% | 31.0% |
| | CY 2001 | 25.69% | 29.1% | 18.99% | 36.55% | 31.12% |
| | | | | | | |
| Children's Access to Primary Care Practitioners 12-24 Months | CY 2002 | 97.9% | 98.75% | 93.75% | 96.55% | 97.53% |
| | CY 2001 | 97.67% | 98.85% | 95% | 93.99% | 95.73% |
| | | | | | | |
| Children's Access to Primary Care Practitioners 25 months-6 years | CY 2002 | 91.68 | 93.88 | 78.63 | 88.29 | 90.90 |
| | CY 2001 | 88.78% | 93.61% | 77.46% | 84.89% | 88.21% |
| | | | | | | |
| Children's Access to Primary Care Practitioners 7-11 years | CY 2002 | 84.2 | 90.74 | 69.61 | 82.89 | 84.96 |
| | CY 2001 | 81.21% | 90.46% | 67.42% | 82.26% | 83.51% |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Table 3. HEDIS Measures for CSHCN by Systems of Care

| Utilization Indicators | | Age <1 | Age 1-9 Years | Age 10-19 Years | Total | |
|---|----------------|------------------|----------------------|------------------------|--------------|--|
| Ambulatory Care-Outpatient Visits/1000 Member Months | CY 2002 | 696.7 | 354.1 | 242.5 | 341.0 | |
| | CY 2001 | 782.9 | 340.9 | 226.8 | 290.2 | |
| | | | | | | |
| Ambulatory Care-Emergency Room Visits/1000 Member Months | CY 2002 | 117.4 | 59.5 | 45.2 | 59.2 | |
| | CY 2001 | 80.2 | 44.6 | 38.7 | 42.3 | |
| | | | | | | |
| Ambulatory Care-Ambulatory Surgery Visits/1000 Member Months | CY 2002 | 7.7 | 6.8 | 3.3 | 5.4 | |
| | CY 2001 | 13.8 | 7.3 | 3.3 | 5.3 | |
| | | | | | | |
| Ambulatory Care-Observation Room Visits/1000 Member Months | CY 2002 | 1.4 | .6 | .7 | .7 | |
| | CY 2001 | 2 | .6 | .8 | .7 | |
| | | | | | | |
| Inpatient Acute Care-Total Days/1000 Member Months | CY 2002 | 185.4 | 34.5 | 28.2 | 46.2 | |
| | CY 2001 | 270.1 | 41.7 | 22.7 | 36.8 | |
| | | | | | | |
| Inpatient Acute Care-Medical Days/1000 Member Months | CY 2002 | 100.9 | 23.2 | 16.7 | 27.9 | |
| | CY 2001 | 109 | 26.5 | 15.5 | 22.5 | |
| | | | | | | |
| Inpatient Acute Care-Surgery Days/1000 Member Months | CY 2002 | 84.5 | 11.2 | 8.7 | 17.1 | |
| | CY 2001 | 161.1 | 15.2 | 7.2 | 14.2 | |
| | | | | | | |
| Inpatient Acute Care-Maternity Days/1000 Member Months | CY 2002 | | | 2.8 | 2.8 | |
| | CY 2001 | | | N/A | N/A | |

Appendix I. Description of HEDIS Measures¹

1. **Childhood Immunization Rate 1-** The percentage of enrolled children who turned 2 years old during the measurement year, who were continuously enrolled immediately preceding their 2nd birthday, who were identified as having had 4 DtaP/DT, 3 IPV/OPV, 1 MMR, 3 H influenza type B, and 3 hepatitis B by the time period specified and by the member's 2nd birthday.
2. **Childhood Immunization Rate 2-** The percentage of children as described in Childhood Immunization Rate 1 who have received **all** of the vaccines listed in Rate 1 and at least one chicken pox vaccine.
3. **Adolescent Immunization Rate 1-** The percentage of enrolled adolescents who turned 13 years old during the measurement year, were continuously enrolled for 12 months immediately prior to their 13th birthday and who were identified as having had a 2nd dose of MMR, and 3 hepatitis B vaccines.
4. **Adolescent Immunization Rate 2-** The percentage of enrolled adolescents who received **all** of the vaccinations listed in Rate 1 and at least 1 chicken pox vaccine.
5. **Breast Cancer Screening-**The percentage of women age 50-69 years who were continuously enrolled ² during the measurement year and the year prior to the measurement year who had a mammogram during the measurement year or year prior to the measurement year.
6. **Cervical Cancer Screening-**The percentage of women age 18-64 years who were continuously enrolled during the measurement year and the 2 years prior to the measurement year, and received 1 or more Pap tests during the measurement year or the 2 years prior to the measurement year.
7. **Diabetic HbA1c Testing-**The percentage of members with diabetes (Type I and Type 2) age 18-75 years, who were continuously enrolled during the measurement year and had 1 or more HbA1c tests during the measurement year.
8. **Diabetic Retinal Eye Exams-** The percentage of members with diabetes (Type I and Type 2) age 18-75 years, who were continuously enrolled² during the measurement year and had an eye screening for diabetic retinal disease during the measurement year.
9. **Diabetic LDL-C Screening-** The percentage of members with diabetes (Type I and Type 2) age 18-75 years, who were continuously enrolled during the measurement year and had an LCL-C test done during the measurement year or year prior to the measurement year.
10. **Use of Appropriate Medications for People with Asthma-**The percentage of members age 5-56 years with a diagnosis of persistent asthma that are being prescribed medications acceptable as primary therapy for long-term control of asthma. This measure is reported for 3 age stratifications (based on age as of December 31 of the measurement year); 5-9 year-olds, 10-17 year-olds, and 18-56 year-olds.

¹ Source-HEDIS 2003, Volume 2

11. **Adults' Access to Preventive/Ambulatory Health Services**- The percentage of enrollees age 20-44, 45-64, and 65 and older who had an ambulatory or preventive-care visit during the measurement year and who were continuously enrolled during the measurement year. ^{NOTE}
12. **Children's Access to Primary Care Practitioners**- The percentage of enrollees age 12-24 months, 25 months-6 years, and 7-11 years who had a visit with a primary care practitioner during the measurement year.
13. **Well-Child Visits in the First 15 Months of Life**- The percentage of enrolled members who turned 15 months old during the measurement year, who were continuously enrolled from 31 days of age, and who received either zero, one, two, three, four, five, or six or more well-child visits with a primary care practitioner during their first 15 months of life.
14. **Well Child Visits in the 3rd-6th Years of Life**- The percentage of continuously enrolled members who were three, four, five or six years old during the measurement year and received one or more well-child visits with a primary care practitioner during the measurement year.
15. **Timeliness of Prenatal Care**- The percentage of women who delivered a live birth between November 6 of the year prior to the measurement year and November 5 of the measurement year and who were continuously enrolled at least 43 days prior to the delivery through 56 days after delivery who received a prenatal care visit in the first trimester or within 42 days of enrollment in MCO.
16. **Adolescent Well-Care Visits**- The percentage of continuously enrolled members who were age 12-21 years during the measurement year who have had at least one comprehensive well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year.
17. **Ambulatory Care**- The summary of utilization of ambulatory services in the following categories: Outpatient Visits, Emergency Department Visits, Ambulatory Surgery/Procedures performed in hospital outpatient facilities or freestanding surgical centers, and Observation Room Stays that result in discharge.
18. **Inpatient Utilization-General Hospital/Acute Care**- The summary of utilization of acute inpatient services in the following categories: total services, medicine, surgery, and maternity. Nonacute care, mental health and chemical dependency services, as well as newborn care, are excluded.

Appendix II. Numerators and Denominators for Measures

| CHILDHOOD IMMUNIZATION RATE #1 | | | |
|--------------------------------|-----------|-------------|------------|
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 23,213 | 37,954 | 61.16 |
| ACCESS I | 8,725 | 13,617 | 64.07 |
| ACCESS II/III | 6,918 | 10,643 | 65.00 |
| FFS | 7,271 | 12,997 | 55.94 |
| HMO | 299 | 697 | 42.90 |

| CHILDHOOD IMMUNIZATION RATE #2 | | | |
|--------------------------------|-----------|-------------|------------|
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 20,070 | 37,954 | 52.88 |
| ACCESS I | 7,270 | 13,617 | 53.39 |
| ACCESS II/III | 6,383 | 10,643 | 59.97 |
| FFS | 6,165 | 12,997 | 47.43 |
| HMO | 252 | 697 | 36.15 |

| ADOLESCENT IMMUNIZATION RATE #1 - June 2003 | | | |
|---|-----------|-------------|------------|
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 5,006 | 20,477 | 24.45 |
| ACCESS I | 2,340 | 8,488 | 27.57 |
| ACCESS II/III | 1,367 | 5,247 | 26.05 |
| FFS | 1,262 | 6,387 | 19.76 |
| HMO | 37 | 355 | 10.42 |

| ADOLESCENT IMMUNIZATION RATE #2 - June 2003 | | | |
|---|-----------|-------------|------------|
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 203 | 20,477 | 0.99 |
| ACCESS I | 90 | 8,488 | 1.06 |
| ACCESS II/III | 75 | 5,247 | 1.43 |
| FFS | 38 | 6,387 | 0.59 |
| HMO | 0 | 355 | 0.00 |

Appendix II. Numerators and Denominators for Measures

BREAST CANCER SCREENING - July 2003 run

| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
|---------------|-----------|-------------|------------|
| Total | 23,594 | 50,723 | 46.52 |
| ACCESS I | 7,821 | 14,948 | 52.32 |
| ACCESS II/III | 1,325 | 2,539 | 52.19 |
| FFS | 14,404 | 33,115 | 43.50 |
| HMO | 44 | 121 | 36.36 |

CERVICAL CANCER SCREENING - July 2003 run

| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
|---------------|-----------|-------------|------------|
| Total | 82,466 | 164,230 | 50.21 |
| ACCESS I | 38,029 | 64,876 | 58.62 |
| ACCESS II/III | 8,435 | 14,516 | 58.11 |
| FFS | 34,949 | 82,743 | 42.24 |
| HMO | 1,053 | 2,095 | 50.26 |

Diabetic Hemoglobin HbA1c testing

| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
|---------------|-----------|-------------|------------|
| Total | 18,284 | 58,342 | 31.34 |
| ACCESS I | 8,557 | 16,621 | 51.48 |
| ACCESS II/III | 1,818 | 3,541 | 51.34 |
| FFS | 7,807 | 38,017 | 20.54 |
| HMO | 102 | 163 | 62.58 |

Diabetic LDL-C Screening

| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
|---------------|-----------|-------------|------------|
| Total | 17,590 | 58,342 | 30.15 |
| ACCESS I | 8,790 | 16,621 | 52.88 |
| ACCESS II/III | 1,825 | 3,541 | 51.54 |
| FFS | 6,874 | 38,017 | 18.08 |
| HMO | 101 | 163 | 61.96 |

Diabetic Retinal Eye Exams

| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
|---------------|-----------|-------------|------------|
| Total | 30,595 | 58,342 | 52.44 |
| ACCESS I | 9,019 | 16,621 | 54.26 |
| ACCESS II/III | 1,668 | 3,541 | 47.11 |
| FFS | 19,852 | 38,017 | 52.22 |
| HMO | 56 | 163 | 34.36 |

Appendix II. Numerators and Denominators for Measures

| USE OF APPROPRIATE ASTHMA MEDS 5-9 YEARS OLD | | | |
|---|-----------|-------------|------------|
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 4,122 | 5,856 | 70.39 |
| ACCESS I | 1,447 | 2,081 | 69.53 |
| ACCESS II/III | 1,415 | 1,840 | 76.90 |
| FFS | 1,236 | 1,899 | 65.09 |
| HMO | 24 | 36 | 66.67 |

| USE OF APPROPRIATE ASTHMA MEDS 10-17 YEARS OLD | | | |
|---|-----------|-------------|------------|
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 4,693 | 6,939 | 67.63 |
| ACCESS I | 1,783 | 2,702 | 65.99 |
| ACCESS II/III | 1,473 | 1,992 | 73.95 |
| FFS | 1,403 | 2,191 | 64.03 |
| HMO | 34 | 54 | 62.96 |

| USE OF APPROPRIATE ASTHMA MEDS 18-56 YEARS OLD | | | |
|---|-----------|-------------|------------|
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 9,102 | 13,154 | 69.20 |
| ACCESS I | 3,567 | 5,182 | 68.83 |
| ACCESS II/III | 680 | 968 | 70.25 |
| FFS | 4,824 | 6,950 | 69.41 |
| HMO | 31 | 54 | 57.41 |

| USE OF APPROPRIATE ASTHMA MEDS COMBINED RATE ALL AGES | | | |
|--|-----------|-------------|------------|
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 17,917 | 25,949 | 69.05 |
| ACCESS I | 6,797 | 9,965 | 68.21 |
| ACCESS II/III | 3,568 | 4,800 | 74.33 |
| FFS | 7,463 | 11,040 | 67.60 |
| HMO | 89 | 144 | 61.81 |

| ADULT ACCESS TO PREVENTIVE/AMBULATORY HEALTH SERVICES 20-44 years old | | | |
|--|-----------|-------------|------------|
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 121,613 | 154,294 | 78.82 |
| ACCESS I | 50,091 | 61,765 | 81.10 |
| ACCESS II/III | 11,052 | 14,392 | 76.79 |
| FFS | 58,901 | 75,895 | 77.61 |
| HMO | 1,569 | 2,242 | 69.98 |

Appendix II. Numerators and Denominators for Measures

| ADULT ACCESS TO PREVENTIVE/AMBULATORY HEALTH SERVICES | | | |
|---|-----------|-------------|------------|
| 45-64 years old | | | |
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 83,371 | 101,169 | 82.41 |
| ACCESS I | 28,463 | 32,019 | 88.89 |
| ACCESS II/III | 5,759 | 6,821 | 84.43 |
| FFS | 48,801 | 61,876 | 78.87 |
| HMO | 348 | 453 | 76.82 |

| ADULT ACCESS TO PREVENTIVE/AMBULATORY HEALTH SERVICES | | | |
|---|-----------|-------------|------------|
| 65-older years old | | | |
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 111,411 | 140,160 | 79.49 |
| ACCESS I | 8,958 | 9,628 | 93.04 |
| ACCESS II/III | 1,890 | 2,135 | 88.52 |
| FFS | 100,561 | 128,395 | 78.32 |
| HMO | 2 | 2 | 100.00 |

| CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS | | | |
|---|-----------|-------------|------------|
| 12-24 mths | | | |
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 43,406 | 45,370 | 95.67 |
| ACCESS I | 13,948 | 14,316 | 97.43 |
| ACCESS II/III | 12,494 | 13,059 | 95.67 |
| FFS | 16,311 | 17,273 | 94.43 |
| HMO | 653 | 722 | 90.44 |

| CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS | | | |
|---|-----------|-------------|------------|
| 25 mths - 6 yrs | | | |
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 127,170 | 148,992 | 85.35 |
| ACCESS I | 44,853 | 51,062 | 87.84 |
| ACCESS II/III | 37,699 | 42,933 | 87.81 |
| FFS | 42,985 | 52,803 | 81.41 |
| HMO | 1,633 | 2,194 | 74.43 |

| CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS | | | |
|---|-----------|-------------|------------|
| 7 yrs - 11 yrs | | | |
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 70,777 | 87,371 | 81.01 |
| ACCESS I | 25,792 | 31,736 | 81.27 |
| ACCESS II/III | 19,468 | 22,268 | 87.43 |
| FFS | 24,806 | 32,401 | 76.56 |
| HMO | 711 | 966 | 73.60 |

Appendix II. Numerators and Denominators for Measures

| Well-child visits in the first 15 months of life | | | | | | | | |
|--|----------|---------|----------|----------|----------|----------|-----------|------|
| PERCENTAGES | | | | | | | | |
| Syscare | 0 visits | 1 visit | 2 visits | 3 visits | 4 visits | 5 visits | 6+ visits | |
| ACCESS I | 1.93% | 2.49% | 4.01% | 6.54% | 12.59% | 22.19% | 50.24% | 100% |
| ACCESS II/III | 0.97% | 1.45% | 2.57% | 5.12% | 10.76% | 23.87% | 55.26% | 100% |
| FFS | 6.35% | 4.92% | 7.39% | 11.20% | 16.71% | 20.04% | 33.39% | 100% |
| HMO | 6.75% | 7.08% | 14.17% | 15.18% | 23.95% | 20.40% | 12.48% | 100% |

| Counts | | | | | | | | |
|---------------|----------|---------|----------|----------|----------|----------|-----------|--------|
| | 0 visits | 1 Visit | 2 Visits | 3 Visits | 4 Visits | 5 Visits | 6+ Visits | Total |
| ACCESS I | 248 | 321 | 517 | 843 | 1,622 | 2,858 | 6,472 | 12,881 |
| ACCESS II/III | 97 | 145 | 257 | 512 | 1,076 | 2,388 | 5,528 | 10,003 |
| FFS | 1,097 | 850 | 1,278 | 1,937 | 2,889 | 3,464 | 5,772 | 17,287 |
| HMO | 40 | 42 | 84 | 90 | 142 | 121 | 74 | 593 |
| | 1,482 | 1,358 | 2,136 | 3,382 | 5,729 | 8,831 | 17,846 | 40,764 |
| | 3.64% | 3.33% | 5.24% | 8.30% | 14.05% | 21.66% | 43.78% | 100% |

Well-child visits in the 3rd, 4th, 5th, and 6th years of life

| SYSCARE | SCREENS | ELIGIBLES | PERCENTAGE |
|---------------|---------|-----------|------------|
| Total | 68,707 | 116,914 | 58.77 |
| ACCESS I | 24,276 | 40,390 | 60.10 |
| ACCESS II/III | 20,627 | 33,574 | 61.44 |
| FFS | 23,136 | 41,249 | 56.09 |
| HMO | 668 | 1,701 | 39.27 |

Adolescent Well-care Visits

| SYSCARE | SCREENS | ELIGIBLES | PERCENTAGE |
|---------------|---------|-----------|------------|
| Total | 42,245 | 147,395 | 28.66 |
| ACCESS I | 16,032 | 57,539 | 27.86 |
| ACCESS II/III | 10,669 | 33,797 | 31.57 |
| FFS | 15,525 | 55,964 | 27.74 |
| HMO | 19 | 95 | 20.00 |

TIMELINESS OF PRENATAL CARE

| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
|---------------|-----------|-------------|------------|
| Total | 15,773 | 38,353 | 41.13 |
| ACCESS I | 4,310 | 11,267 | 38.25 |
| ACCESS II/III | 1,565 | 3,007 | 52.05 |
| FFS | 9,853 | 23,728 | 41.52 |
| HMO | 45 | 351 | 12.82 |

Appendix II. Numerators and Denominators for Measures

| Inpatient Utilization - General Hospital /Acute Care | | | | | | | | |
|--|---------|-------------------------|---------|--------------------|-----------------------|----------------------|----------------------|--------------|
| Total Inpatient Acute Care | | | | | | | | |
| Age | D/C'S | DC's/ 1,000 M/M's | Days | Days/1,000 MM's | Avg Length of Stay | DC's/1000 members | Days/1000 members | Total Months |
| <1 | 9,202 | 12.2 | 40,744 | 54.2 | 4.4 | 146.8 | 649.8 | 752,378 |
| 1 to 9 | 10,864 | 2.8 | 37,821 | 9.7 | 3.5 | 33.5 | 116.8 | 3,887,047 |
| 10 to 19 | 19,662 | 7.1 | 60,191 | 21.9 | 3.1 | 85.7 | 262.3 | 2,753,791 |
| 20 to 44 | 77,438 | 28.4 | 267,753 | 98.2 | 3.5 | 340.9 | 1178.9 | 2,725,495 |
| 45 to 64 | 38,044 | 26.9 | 214,772 | 151.8 | 5.6 | 322.7 | 1821.7 | 1,414,783 |
| 65 to 74 | 9,757 | 12.7 | 48,621 | 63.4 | 5.0 | 152.6 | 760.2 | 767,495 |
| 75 to 84 | 10,345 | 14.4 | 51,792 | 72.1 | 5.0 | 172.8 | 865.0 | 718,475 |
| 85+ | 6,694 | 17.1 | 35,493 | 90.5 | 5.3 | 204.9 | 1086.5 | 392,025 |
| Total | 182,006 | 13.6 | 757,187 | 56.5 | 4.2 | 162.9 | 677.5 | 13,411,489 |

| Inpatient Utilization - General Hospital Acute Care | | | | | | | | |
|---|--------|--------------------|---------|--------------------|-----------------------|----------------------|----------------------|--------------|
| Medical | | | | | | | | |
| Age | DC's | DC's/1,000 MM's | Days | Days/1,000 MM's | Avg Length of Stay | DC's/1000 members | Days/1000 members | Total Months |
| <1 | 8,152 | 10.8 | 26,474 | 35.2 | 3.2 | 130.0 | 422.2 | 752,378 |
| 1 to 9 | 9,353 | 2.4 | 27,694 | 7.1 | 3.0 | 28.9 | 85.5 | 3,887,047 |
| 10 to 19 | 4,591 | 1.7 | 16,221 | 5.9 | 3.5 | 20.0 | 70.7 | 2,753,791 |
| 20 to 44 | 21,616 | 7.9 | 94,849 | 34.8 | 4.4 | 95.2 | 417.6 | 2,725,495 |
| 45 to 64 | 28,986 | 20.5 | 140,130 | 99.0 | 4.8 | 245.9 | 1188.6 | 1,414,783 |
| 65 to 74 | 8,197 | 10.7 | 39,286 | 51.2 | 4.8 | 128.2 | 614.2 | 767,495 |
| 75 to 84 | 8,909 | 12.4 | 43,216 | 60.1 | 4.9 | 148.8 | 721.8 | 718,475 |
| 85+ | 5,883 | 15.0 | 30,241 | 77.1 | 5.1 | 180.1 | 925.7 | 392,025 |
| Total | 95,687 | 7.1 | 418,111 | 31.2 | 4.4 | 85.6 | 374.1 | 13,411,489 |

Appendix II. Numerators and Denominators for Measures

| General Hospital Acute Care | | | | | | | | |
|-----------------------------|--------|--------------------|---------|--------------------|-----------------------|----------------------|----------------------|--------------|
| Surgery | | | | | | | | |
| Age | DC's | DC's/1,000 MM's | Days | Days/1,000 MM's | Avg Length of Stay | DC's/1000 members | Days/1000 members | Total Months |
| <1 | 1,050 | 1.4 | 14,270 | 19.0 | 13.6 | 16.7 | 227.6 | 752,378 |
| 1 to 9 | 1,511 | 0.4 | 10,127 | 2.6 | 6.7 | 4.7 | 31.3 | 3,887,047 |
| 10 to 19 | 1,856 | 0.7 | 10,430 | 3.8 | 5.6 | 8.1 | 45.5 | 2,753,791 |
| 20 to 44 | 9,432 | 3.5 | 57,374 | 21.1 | 6.1 | 41.5 | 252.6 | 2,725,495 |
| 45 to 64 | 9,033 | 6.4 | 74,585 | 52.7 | 8.3 | 76.6 | 632.6 | 1,414,783 |
| 65 to 74 | 1,560 | 2.0 | 9,335 | 12.2 | 6.0 | 24.4 | 146.0 | 767,495 |
| 75 to 84 | 1,436 | 2.0 | 8,576 | 11.9 | 6.0 | 24.0 | 143.2 | 718,475 |
| 85+ | 811 | 2.1 | 5,252 | 13.4 | 6.5 | 24.8 | 160.8 | 392,025 |
| Total | 26,689 | 2.0 | 189,949 | 14.2 | 7.1 | 23.9 | 170.0 | 13,411,489 |

| Inpatient Utilization - General Hospital/Acute Care | | | | | | | | |
|---|--------|--------------------|---------|--------------------|--------------------------|----------------------|----------------------|--------------|
| Maternity | | | | | | | | |
| Age | DC's | DC's/1,000 MM's | Days | Days/1,000 MM's | Avg Length of Stay | DC's/1000 members | Days/1000 members | Total Months |
| 10 to 19 | 13,215 | 4.8 | 33,540 | 12.2 | 2.5 | 57.6 | 146.2 | 2,753,791 |
| 20 to 44 | 46,390 | 17.0 | 115,530 | 42.4 | 2.5 | 204.2 | 508.7 | 2,725,495 |
| 45 to 64 | 25 | 0.02 | 57 | 0.04 | 2.3 | 0.2 | 0.5 | 1,414,783 |
| Total | 59,630 | 8.6 | 149,127 | 21.6 | 2.4 | 103.8 | 259.6 | 6,894,069 |

AMBULATORY CARE

| Outpatient Visits | | | | |
|-------------------|------------|-----------|------------------------|---------------------|
| Age | MM's | Visits | Visits/1000 Members | Visits/1000 MM's |
| <1 | 752,378 | 415,689 | 6630.0 | 552.5 |
| 1 to 9 | 3,887,047 | 922,648 | 2848.4 | 237.4 |
| 10 to 19 | 2,753,791 | 552,338 | 2406.9 | 200.6 |
| 20 to 44 | 2,725,495 | 1,050,564 | 4625.5 | 385.5 |
| 45 to 64 | 1,414,783 | 781,555 | 6629.0 | 552.4 |
| 65 to 74 | 767,495 | 392,095 | 6130.5 | 510.9 |
| 75 to 84 | 718,475 | 379,816 | 6343.7 | 528.6 |
| 85+ | 392,025 | 209,781 | 6421.5 | 535.1 |
| Total | 13,411,489 | 4,704,486 | 4209.4 | 350.8 |

Emergency Room Visits

| Age | MM's | Visits | Visits/1000 Members | Visits/1000 MM's |
|----------|------------|---------|------------------------|---------------------|
| <1 | 752,378 | 68,861 | 1098.3 | 91.5 |
| 1 to 9 | 3,887,047 | 186,109 | 574.6 | 47.9 |
| 10 to 19 | 2,753,791 | 122,213 | 532.6 | 44.4 |
| 20 to 44 | 2,725,495 | 269,136 | 1185.0 | 98.7 |
| 45 to 64 | 1,414,783 | 95,899 | 813.4 | 67.8 |
| 65 to 74 | 767,495 | 26,025 | 406.9 | 33.9 |
| 75 to 84 | 718,475 | 23,446 | 391.6 | 32.6 |
| 85+ | 392,025 | 13,101 | 401.0 | 33.4 |
| Total | 13,411,489 | 804,790 | 720.1 | 60.0 |

Ambulatory Surgery

| Age | MM's | Visits | Visits/1000 Members | Visits/1000 MM's |
|----------|------------|---------|------------------------|---------------------|
| <1 | 752,378 | 3,454 | 55.1 | 4.6 |
| 1 to 9 | 3,887,047 | 12,149 | 37.5 | 3.1 |
| 10 to 19 | 2,753,791 | 6,270 | 27.3 | 2.3 |
| 20 to 44 | 2,725,495 | 28,719 | 126.4 | 10.5 |
| 45 to 64 | 1,414,783 | 33,350 | 282.9 | 23.6 |
| 65 to 74 | 767,495 | 14,961 | 233.9 | 19.5 |
| 75 to 84 | 718,475 | 11,467 | 191.5 | 16.0 |
| 85+ | 392,025 | 3,646 | 111.6 | 9.3 |
| Total | 13,411,489 | 114,016 | 102.0 | 8.5 |

Observation Room Visits

| Age | MM's | Visits | Visits/1000 Members | Visits/1000 MM's |
|----------|------------|--------|------------------------|---------------------|
| <1 | 752,378 | 535 | 8.5 | 0.7 |
| 1 to 9 | 3,887,047 | 907 | 2.8 | 0.2 |
| 10 to 19 | 2,753,791 | 4,526 | 19.7 | 1.6 |
| 20 to 44 | 2,725,495 | 11,811 | 52.0 | 4.3 |
| 45 to 64 | 1,414,783 | 484 | 4.1 | 0.3 |
| 65 to 74 | 767,495 | 120 | 1.9 | 0.2 |
| 75 to 84 | 718,475 | 104 | 1.7 | 0.1 |
| 85+ | 392,025 | 75 | 2.3 | 0.2 |
| Total | 13,411,489 | 18,562 | 16.6 | 1.4 |

Appendix III. Numerators and Denominators for HEDIS Measures for CSHCN

| CHILDHOOD IMMUNIZATION RATE #1 | | | |
|--------------------------------|-----------|-------------|------------|
| CSHCN | | | |
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 986 | 1,522 | 64.78 |
| ACCESS I | 273 | 408 | 66.91 |
| ACCESS II/III | 267 | 376 | 71.01 |
| FFS | 438 | 730 | 60.00 |
| HMO | 8 | 8 | 100.00 |

| CHILDHOOD IMMUNIZATION RATE #2 | | | |
|--------------------------------|-----------|-------------|------------|
| CSHCN | | | |
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 877 | 1,522 | 57.62 |
| ACCESS I | 225 | 408 | 55.15 |
| ACCESS II/III | 250 | 376 | 66.49 |
| FFS | 396 | 730 | 54.25 |
| HMO | 6 | 8 | 75.00 |

| ADOLESCENT IMMUNIZATION RATE #1 | | | |
|---------------------------------|-----------|-------------|------------|
| CSHCN | | | |
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 292 | 1,126 | 25.93 |
| ACCESS I | 114 | 374 | 30.48 |
| ACCESS II/III | 95 | 363 | 26.17 |
| FFS | 83 | 389 | 21.34 |
| HMO | 0 | 0 | 0.00 |

| ADOLESCENT IMMUNIZATION RATE #2 | | | |
|---------------------------------|-----------|-------------|------------|
| CSHCN | | | |
| SYSCARE | NUMERATOR | DENOMINATOR | PERCENTAGE |
| Total | 22 | 1,126 | 1.95 |
| ACCESS I | 11 | 374 | 2.94 |
| ACCESS II/III | 7 | 363 | 1.93 |
| FFS | 4 | 389 | 1.03 |
| HMO | 0 | 0 | 0.00 |

| Well-child visits in the first 15 months of life | | | | | | | | |
|--|----------|---------|----------|----------|----------|----------|-----------|---------|
| CSHCN | | | | | | | | |
| PERCENTAGES | | | | | | | | |
| Syscare | 0 visits | 1 visit | 2 visits | 3 visits | 4 visits | 5 visits | 6+ visits | |
| ACCESS I | 2.50% | 2.37% | 5.30% | 7.19% | 12.93% | 25.33% | 44.39% | 100.00% |
| ACCESS II/III | 0.41% | 1.22% | 2.37% | 5.79% | 13.72% | 22.64% | 53.85% | 100.00% |
| FFS | 6.40% | 5.71% | 8.22% | 11.78% | 16.59% | 20.06% | 31.24% | 100.00% |
| HMO | 6.90% | 10.34% | 17.24% | 13.79% | 27.59% | 17.24% | 6.90% | 100.00% |

Appendix III. Numerators and Denominators for HEDIS Measures for CSCHN

| | COUNTS | | | | | | | Total |
|---------------|----------|---------|----------|----------|----------|----------|-----------|---------|
| | 0 visits | 1 visit | 2 visits | 3 visits | 4 visits | 5 visits | 6+ visits | |
| ACCESS I | 57 | 54 | 121 | 164 | 295 | 578 | 1,013 | 2,282 |
| ACCESS II/III | 7 | 21 | 41 | 100 | 237 | 391 | 930 | 1,727 |
| FFS | 212 | 189 | 272 | 390 | 549 | 664 | 1,034 | 3,310 |
| HMO | 2 | 3 | 5 | 4 | 8 | 5 | 2 | 29 |
| | 278 | 267 | 439 | 658 | 1,089 | 1,638 | 2,979 | 7,348 |
| | 3.78% | 3.63% | 5.97% | 8.95% | 14.82% | 22.29% | 40.54% | 100.00% |

Well-child visits in the 3rd, 4th, 5th, and 6th years of life

Percentages

CSHCN

| SYSCARE | SCREENS | ELIGIBLES | PERCENTAGE |
|---------------|---------|-----------|------------|
| Total | 11,500 | 17,945 | 64.08 |
| ACCESS I | 3,784 | 5,911 | 64.02 |
| ACCESS II/III | 3,314 | 4,895 | 67.70 |
| FFS | 4,374 | 7,062 | 61.94 |
| HMO | 28 | 77 | 36.36 |

CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS

12 - 24 mths CSHCN

| SYSCARE | SCREENS | ELIGIBLE | PERCENTAGE |
|---------------|---------|----------|------------|
| Total | 7,873 | 8,072 | 97.53 |
| ACCESS I | 2,376 | 2,427 | 97.90 |
| ACCESS II/III | 2,136 | 2,163 | 98.75 |
| FFS | 3,331 | 3,450 | 96.55 |
| HMO | 30 | 32 | 93.75 |

CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS

25 mths - 6 yrs CSHCN

| SYSCARE | SCREENS | ELIGIBLE | PERCENTAGE |
|---------------|---------|----------|------------|
| Total | 21,644 | 23,812 | 90.90 |
| ACCESS I | 7,242 | 7,899 | 91.68 |
| ACCESS II/III | 6,108 | 6,506 | 93.88 |
| FFS | 8,202 | 9,290 | 88.29 |
| HMO | 92 | 117 | 78.63 |

CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS

7 yrs - 11 yrs CSHCN

| SYSCARE | SCREENS | ELIGIBLE | PERCENTAGE |
|---------------|---------|----------|------------|
| Total | 14,688 | 17,289 | 84.96 |
| ACCESS I | 4,333 | 5,146 | 84.20 |
| ACCESS II/III | 3,508 | 3,866 | 90.74 |
| FFS | 6,776 | 8,175 | 82.89 |

HMO

71

102

69.61

Appendix III. Numerators and Denominators for HEDIS Measures for CSHCN

| Total Inpatient Acute Care CSCHN | | | | | | | | |
|---|-------------------|--------------------------------|--------|-------------------|-----------------------|---------------------------------|---------------------|--------------|
| Age | DC's ¹ | DC's/1,000 MMs ² | Days | Days/1,000 MMs | Avg Length of Stay | DCs/1000 Mmbrs. ³ | Days/1000 Mmbrs. | Total Months |
| <1 | 3,017 | 28.3 | 19,753 | 185.4 | 6.5 | 339.9 | 2225.1 | 106,528 |
| 1 to 9 | 4,362 | 7.8 | 19,334 | 34.5 | 4.4 | 93.3 | 413.5 | 561,069 |
| 10 to 19 | 2,811 | 6.1 | 12,942 | 28.2 | 4.6 | 73.4 | 338.0 | 459,443 |
| Total | 10,190 | 9.0 | 52,029 | 46.2 | 5.1 | 108.5 | 554.0 | 1,127,040 |

Inpatient Utilization - General Hospital Acute Care**CSHCN****Medical**

| Age | DCs | DCs/1,000 MMs | Days | Days/1,000 MMs | Avg Length of Stay | DCs/1000 Mmbrs. | Days/1000 Mmbrs. | Total Months |
|----------|-------|------------------|--------|-------------------|--------------------------|--------------------|---------------------|--------------|
| <1 | 2,525 | 23.7 | 10,748 | 100.9 | 4.3 | 284.4 | 1210.7 | 106,528 |
| 1 to 9 | 3,635 | 6.5 | 13,029 | 23.2 | 3.6 | 77.7 | 278.7 | 561,069 |
| 10 to 19 | 1,839 | 4.0 | 7,656 | 16.7 | 4.2 | 48.0 | 200.0 | 459,443 |
| Total | 7,999 | 7.1 | 31,433 | 27.9 | 3.9 | 85.2 | 334.7 | 1,127,040 |

Inpatient Utilization - General Hospital Acute Care**CSHCN****Surgery**

| Age | DCs | DCs/1,000 MMs | Days | Days/1,000 MMs | Avg Length of Stay | DCs/1000 Mmbrs. | Days/1000 Mmbrs. | Total Months |
|----------|-------|------------------|--------|-------------------|--------------------------|--------------------|---------------------|--------------|
| <1 | 492 | 4.6 | 9,005 | 84.5 | 18.3 | 55.4 | 1014.4 | 106,528 |
| 1 to 9 | 727 | 1.3 | 6,305 | 11.2 | 8.7 | 15.5 | 134.8 | 561,069 |
| 10 to 19 | 511 | 1.1 | 4,007 | 8.7 | 7.8 | 13.3 | 104.7 | 459,443 |
| Total | 1,730 | 1.5 | 19,317 | 17.1 | 11.2 | 18.4 | 205.7 | 1,127,040 |

Inpatient Utilization - General Hospital Acute Care**CSHCN****Maternity**

| Age | DCs | DCs/1,000 MMs | Days | Days/1,000 MMs | Avg Length of Stay | DCs/1000 Mmbrs. | Days/1000 Mmbrs. | Total Months |
|----------|-----|------------------|-------|-------------------|--------------------------|--------------------|---------------------|--------------|
| 10 to 19 | 461 | 1.0 | 1,279 | 2.8 | 2.8 | 12.0 | 33.4 | 459,443 |
| Total | 461 | 1.0 | 1,279 | 2.8 | 2.8 | 12.0 | 33.4 | 459,443 |

¹ DCs= Discharges² MM= Member Months³ Mmbr.= Members

Appendix III. Numerators and Denominators for HEDIS Measures for CSHCN

AMBULATORY CARE- CSHCN

Outpatient Visits

| Age | MMs | Visits | Visits/1000 Mmbrs. | Visits/1000 MMs |
|----------|-----------|---------|-----------------------|--------------------|
| <1 | 106,528 | 74,219 | 8360.5 | 696.7 |
| 1 to 9 | 561,069 | 198,654 | 4248.8 | 354.1 |
| 10 to 19 | 459,443 | 111,417 | 2910.1 | 242.5 |
| Total | 1,127,040 | 384,290 | 4091.7 | 341.0 |

Emergency Room Visits

| Age | MMs | Visits | Visits/1000 Mmbrs. | Visits/1000 MMs |
|----------|-----------|--------|-----------------------|--------------------|
| <1 | 106,528 | 12,506 | 1408.8 | 117.4 |
| 1 to 9 | 561,069 | 33,400 | 714.4 | 59.5 |
| 10 to 19 | 459,443 | 20,762 | 542.3 | 45.2 |
| Total | 1,127,040 | 66,668 | 709.8 | 59.2 |

Ambulatory Surgery

| Age | MMs | Visits | Visits/1000 Mmbrs. | Visits/1000 MMs |
|----------|-----------|--------|-----------------------|--------------------|
| <1 | 106,528 | 816 | 91.9 | 7.7 |
| 1 to 9 | 561,069 | 3,788 | 81.0 | 6.8 |
| 10 to 19 | 459,443 | 1,495 | 39.0 | 3.3 |
| Total | 1,127,040 | 6,099 | 64.9 | 5.4 |

Observation Room Visits

| Age | MMs | Visits | Visits/1000 Mmbrs. | Visits/1000 MMs |
|----------|-----------|--------|-----------------------|--------------------|
| <1 | 106,528 | 144 | 16.2 | 1.4 |
| 1 to 9 | 561,069 | 363 | 7.8 | 0.6 |
| 10 to 19 | 459,443 | 318 | 8.3 | 0.7 |
| Total | 1,127,040 | 825 | 8.8 | 0.7 |